

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended): A method of setting up a delegated connection, the method comprising:

designating a first portion of a system memory within a first computing system for storage of frame payload data in legacy buffers, wherein the first portion of the system memory is allocated to a software driver configured to communicate between a dedicated hardware offload unit and a TCP stack;

designating a second portion of the system memory for storage of frame payload data in user buffers, wherein the second portion of the system memory is allocated to an application program;

establishing a TCP connection between the first computing system and a second computing system; and

determining whether or not to delegate the TCP connection for processing by the dedicated hardware offload unit to offload the TCP connection processing from a CPU of the first computing system;

setting up an entry in a delegated connection table upon determining to delegate the TCP connection;

receiving a frame for the delegated connection and determining a user buffer is available for storage of frame payload data; and

uploading a portion of the frame to a location in the second portion of the system memory that is specified in the user buffer information.

2. (Cancelled)
3. (Previously Presented): The method of claim 1, wherein the step of determining is based on at least one characteristic of the TCP connection.
4. (Original): The method of claim 3, wherein the characteristic is a priority specified for the TCP connection.
5. (Original): The method of claim 3, wherein the at least one characteristic is a duration of the TCP connection.
6. (Original): The method of claim 3, wherein the at least one characteristic is a frame rate of the TCP connection.
7. (Currently Amended): The method of claim [[2]]1, further comprising transferring user buffer information for the delegated connection to the hardware.
- 8-11. (Cancelled)
12. (Currently Amended): A system for setting up a delegated connection, the system comprising:

means for designating a first portion of a system memory within a first computing system for storage of frame payload data in legacy buffers, wherein the first portion of the system memory is allocated to a software driver configured to communicate between a dedicated hardware offload unit and a TCP stack;

means for designating a second portion of the system memory for storage of frame payload data in user buffers, wherein the second portion of the system memory is allocated to an application program;

means for establishing a TCP connection between the first computing system and a second computing system; and

means for determining whether or not to delegate the TCP connection for processing by the dedicated hardware offload unit to offload the TCP connection processing from a CPU of the first computing system; and

means for setting up an entry in a delegated connection table upon determining to delegate the TCP connection;

means for receiving a frame for the delegated connection and determining a user buffer is available for storage of frame payload data; and

means for uploading a portion of the frame to a location in the second portion of the system memory that is specified in the user buffer information.

13. (Cancelled)

14. (Previously Presented): The system of claim 12, further comprising means for transferring user buffer information for the delegated connection to the dedicated hardware offload unit.

15. (Cancelled)

16. (Original): The system of claim 12, further comprising means for setting a maximum segment size.

17. (Original): The system of claim 12, further comprising means for enabling and disabling acknowledgement coalescing.

18-31. (Cancelled)

32. (New): A method of setting up a delegated connection, the method comprising:

designating a first portion of a system memory within a first computing system for storage of frame payload data in legacy buffers, wherein the first portion of the system memory is allocated to a software driver configured to communicate between a dedicated hardware offload unit and a TCP stack;

designating a second portion of the system memory for storage of frame payload data in user buffers, wherein the second portion of the system memory is allocated to an application program;

establishing a TCP connection between the first computing system and a second computing system; and

determining whether or not to delegate the TCP connection for processing by the dedicated hardware offload unit to offload the TCP connection processing from a CPU of the first computing system;

setting up an entry in a delegated connection table upon determining to delegate the TCP connection;

receiving a frame for the delegated connection and determining a user buffer is not available; and

uploading a portion of the frame to a legacy buffer in the first portion of the system memory.

33. (New): The method of claim 32, wherein the step of determining is based on at least one characteristic of the TCP connection.
34. (New): The method of claim 33, wherein the characteristic is a priority specified for the TCP connection.
35. (New): The method of claim 33, wherein the at least one characteristic is a duration of the TCP connection.
36. (New): The method of claim 33, wherein the at least one characteristic is a frame rate of the TCP connection.
37. (New): The method of claim 32, further comprising transferring user buffer information for the delegated connection to the hardware.
38. (New): A system for setting up a delegated connection, the system comprising:
- means for designating a first portion of a system memory within a first computing system for storage of frame payload data in legacy buffers, wherein the first portion of the system memory is allocated to a software driver configured to communicate between a dedicated hardware offload unit and a TCP stack;
 - means for designating a second portion of the system memory for storage of frame payload data in user buffers, wherein the second portion of the system memory is allocated to an application program;
 - means for establishing a TCP connection between the first computing system and a second computing system;

means for determining whether or not to delegate the TCP connection for processing by the dedicated hardware offload unit to offload the TCP connection processing from a CPU of the first computing system;

means for setting up an entry in a delegated connection table upon determining to delegate the TCP connection;

means for receiving a frame for the delegated connection and determining a user buffer is not available; and

means for uploading a portion of the frame to a legacy buffer in the first portion of the system memory.

39. (New): The system of claim 38, further comprising means for transferring user buffer information for the delegated connection to the dedicated hardware offload unit.
40. (New): The system of claim 38, further comprising means for setting a maximum segment size.
41. (New): The system of claim 38, further comprising means for enabling and disabling acknowledgement coalescing.